

CLAIMS

What is claimed is:

1. A user input device comprising:

a fingerprint scanner; and

a driver operably coupled to the fingerprint scanner to enable the fingerprint scanner to perform a function, wherein the function comprises at least one of a scroll function, a zoom function, a hot-key function, and a select function.

2. The user input device of claim 1 wherein the fingerprint scanner comprises a CCD array.

3. The user input device of claim 1 wherein the driver is operable to configure a computer associated with the fingerprint scanner to switch between a security mode and the function.

4. The user input device of claim 1 wherein the software driver configures the computer to operate in a security mode while simultaneously performing at least one of a scroll function, a zoom function, a hot-key function, and a select function.

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5. The user input device of claim 1 wherein the fingerprint scanner is disposed on a PCMCIA card.

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6. The user input device of claim 1 wherein the fingerprint scanner comprises a USB interface.

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7. The user input device of claim 1 wherein the fingerprint scanner is disposed on a mouse.

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8. The user input device of claim 1 wherein the fingerprint scanner is disposed on a dumb terminal.

9. A computer system comprising:

a processor;

a fingerprint scanner operably coupled to the processor; and

a driver to configure the fingerprint scanner to perform at least one of a scroll function, a zoom function, a hot-key function, and a select function on the computer.

10. The computer system of claim 9 wherein the processor is disposed on a CPU.

11. The computer system of claim 10 comprising:

a first bridge unit coupled to the CPU; and

an first expansion bus coupled to the first bridge unit.

12. The computer system of claim 11 wherein the fingerprint scanner is coupled to the first expansion bus.

13. The computer system of claim 10 comprising:

a second bridge unit coupled to the first expansion bus; and

a plurality of secondary expansion busses coupled to the second bridge unit.

14. The computer system of claim 13 wherein the fingerprint scanner is disposed on at least one of the plurality of secondary expansion buses.

15. The computer system of claim 9 comprising a display coupled to the first bridge unit.

16. The computer system of claim 9 wherein the computer system is coupled for a network having a plurality of devices coupled thereto.

17. A method of operating a fingerprint scanner comprising the acts of:

(a) configuring a computer to perform at least one of a scroll function, a zoom
function, a hot-key function, and a select function in response to signals generated
by the fingerprint scanner; and

(b) generating signals based on input to the fingerprint scanner wherein the input to
the fingerprint scanner comprises at least one of a unique image and motion.

18. The method of claim 17 comprising:

monitoring the computer system to determine if a need arises to configure the computer
for security mode; and

configuring the computer for security mode when the need arises.

19. The method of claim 17 wherein act (a) comprises the act of pressing an alternate
select key to configure the computer to perform at least one of the scroll function, a zoom
function, a hot-key function and a select function.

20. The method of claim 17 wherein act (a) comprises the act of tapping the fingerprint reader to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function.

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21. The method of claim 17 wherein act (a) comprises the act recognizing an acquired fingerprint as corresponding to the appropriate function to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function.

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22. A method of manufacturing a computer system comprising the acts of:

(a) providing a fingerprint scanner;

(b) providing a processor;

(c) operably coupling the fingerprint scanner to the processor; and

(d) providing software that configures the processor to interpret signals from the fingerprint scanner as one of a scroll function, a zoom function, a hot-key function, and a select function.

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23. A method of using a fingerprint scanner configurable to control one of a scroll function, a zoom function, a hot-key function, and a select function, the method comprising the act of:

5 moving a finger on the fingerprint scanner to cause the one of a scroll function, a zoom function, a hot-key function, and a select function.

10 24. The method of claim 23 comprising the act of pressing an alternate select key while simultaneously placing a finger on the fingerprint scanner.

15 25. The method of claim 23 comprising the act of tapping a finger on the fingerprint scanner.

26. A computer system comprising:

means for configuring a computer to perform at least one of a scroll function, a zoom

20 function, a hot-key function, and a select function in response to signals generated by the fingerprint scanner; and

means for generating signals based on input to the fingerprint scanner wherein the input to the fingerprint scanner comprises at least one of a unique image and motion.

5 27. A method of acquiring finger movement velocity and direction information, the method comprising the acts of:

- 10 (a) acquiring a first digital image of a fingerprint;
- (b) acquiring a second digital image of a fingerprint at a specific time after acquiring the first digital image; and
- (c) comparing the first and second digital images for differences to calculate velocity and direction between the first and second digital images.

15 28. The method of claim 27 wherein the act (c) is performed by a computer system coupled to a fingerprint reader.

20 29. The method of claim 27 wherein the act (c) is performed by firmware disposed in a fingerprint reader.

30. An input device comprising:

a fingerprint reader; and

a unit coupled to the fingerprint reader adapted to calculate velocity and direction based on movement of an object on the fingerprint reader.

31. The input device of claim 30 wherein the unit coupled to the fingerprint reader comprises firmware disposed in the fingerprint reader.

32. The input device of claim 30 wherein the unit coupled to the fingerprint reader comprises a processor configured by a software driver.